## **Malaysian Case study**

This is being addressed by the Malaysian collaborators

Make a case study on network performance in Malaysia. Consider what you want to learn (e.g. which sites are using VSATs, how direct are connections, how reliable are the connections, which sites are congested, etc.). Identify hosts at representative (e.g. states, major town and cities, remote areas, educational and commercial network connections) working (i.e. respond to pings) sites in Malaysian states. Spreadsheet of potential sites. The missing states are kedah, pahang, & perlis. It would be good to make the study from different vantage points, e.g. UNIMAS, UTM and SLAC.

For comparison could add hosts at sites in Kalimantan, Sabah or other SE Asian countries. Add these to the monitoring site at UNIMAS, UTM and SLAC. Make sure the sites are working. Gather the data for a a couple of months, meanwhile learn how to access the PingER data and use tools such as Excel to perform analysis on the data. Look at who the Internet Service Providers (e.g. by looking at traceroutes (i.e. we need traceroute working at the monitoring hosts), may have to develop or adapt the SLAC tool for gathering traceroutes on a daily or more frequent basis, this is another task/project)) are for the sites. Analyze the min-RTTs looking for VSATs, look for comparisons (commercial vs A&R sites), look at the traceroutes how direct are the connections (also look at the alpha directivity metrics from PingER). What are the impacts of day vs night weekend vs workday, holidays, are there any other events of interest (earthquakes, cable cuts), route changes.

It is not easy to find such sites in those states. Obvious target is universities, for example UUM in Kedah and UNIMAP in Perlis, but those sites are not ping-able. One way is to approach these universities and explain to them about PingER project and request for the ping packet to be enable.

Draft of study.

Case Study 2013-2014

Spreadsheet of min-RTT from SLAC to Malaysia dec 2014

Presentation on MYREN, by Kamal Hisham, MYREN NOC, kamal@myren.net.my, given at Internet2 meeting Indianapolois, 2014

Spreadsheets for 2013-2014

- Directivity
- Jitter
- Minimum RTT
- Throughput